

Rule 126
Sub
C3

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-- 43. A method of forming a feature having a selected dimension comprising:
forming a first layer having a first thickness on a semiconductor substrate;
forming a second layer over said first layer, said second layer having a second thickness thicker than said first layer and being etchable by a different etch chemistry than said first layer;
forming a recess, having vertical sidewalls separated by a width greater than said selected dimensions, said recess extending through said second layer and not through said first layer;
forming a blanket dielectric layer having a third thickness on the second layer and within the recess and on top of the first layer within the recess, said blanket dielectric layer being on the sidewalls of the second layer, the third thickness being half or less that of the second thickness;
selectively and anisotropically etching the blanket dielectric layer to form dielectric spacers on the sidewalls of the second layer and to remove the blanket dielectric layer from a bottom of the recess;
etching the first layer to expose the substrates and form a gap having a width equal to the selected dimension between the dielectric spacers;
forming a fourth layer in the gap and on the substrate; and
removing any remaining portions of the second layer without removing the dielectric spacers.

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44. The method of claim 43 wherein forming a first layer comprises forming two chemically distinct sub-layers on the surface of the substrate, each being selectively etchable with respect to the other, the combined sub-layers comprising the first layer having the first thickness.

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45. The method of claim 43 wherein forming a first layer comprises:
forming a thermal oxide on the substrate, the substrate formed from silicon;
forming a silicon nitride layer having a thickness of less than five hundred Angstroms on the thermal oxide.